Oracle Day 4 – SELECT Statements

Note: Please watch my YouTube sessions to better understand the descriptions and queries below

NiC IT Academy YouTube Videos for reference

🔵 Oracle SQL Tutorial - English

https://youtube.com/playlist?list=PLsphD3EpR7F9mmtY2jBt_O8Q9XmvrhQEF

🟡 Oracle SQL - தமிழில்

https://youtube.com/playlist?list=PLsphD3EpR7F-u4Jjp_3fYgLSsKwPPTEH4

📌 Oracle SQL Day wise Video: ENGLISH

Oracle SQL Day 1 – Introduction to Oracle - https://youtu.be/hLnKjYGr730

Oracle SQL Day 2 – SQL Types DDL, DML, DRL, DCL, TCL - https://youtu.be/XpgjXvnfZec

Oracle SQL Day 3 – Constraints in Oracle - https://youtu.be/TmYqeFfHyyc

Oracle SQL Day 4 – SELECT Statements in Oracle - https://youtu.be/tYQfBgUCpoI

Oracle SQL Day 5 – Single Row Functions in Oracle - https://youtu.be/4qJJxQuHLC4

Oracle SQL Day 6 – Joins in Oracle - https://youtu.be/CkaqluC2afE

Oracle SQL Day 7 – Aggregate Functions in Oracle - https://youtu.be/BSiCWzj-py8

Oracle SQL Day 8 – Sub Queries in Oracle - https://youtu.be/KtUCyG2cZe4

Oracle SQL Day 9 – SET Operators in Oracle - https://youtu.be/B0JbGbWsEIA

Oracle SQL Day 10 – Analytical Functions in Oracle - https://youtu.be/gRC3ndWLsoo

Oracle SQL Day 11 - Views in Oracle - https://youtu.be/m8a1UtOmd5k

Oracle SQL Day 12 - Indexes in Oracle - https://youtu.be/reL2O-kvNxc

Oracle SQL Day 13 - Regular Expression - https://youtu.be/k_Eo08vLPhU

Select statements:

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```
select * from employees;

select employee_id,first_name,email,hire_date,salary,department_id from employees;

--column alias
select employee_id as emp_id,first_name,email,hire_date,salary,department_id from employees;

select employee_id emp_id,first_name,email,hire_date,salary,department_id from employees;

select employee_id emp_id,first_name,email,hire_date salary,department_id from employees;

-- column concatenation

select employee_id ,first_name,last_name,concat(first_name,last_name),email,
hire_date salary,department_id from employees;

select employee_id ,first_name,last_name,concat(first_name,last_name) full_name,email,
hire_date ,salary,department_id from employees;

select employee_id ,first_name,last_name,concat(first_name,' ',last_name) full_name,email,
hire_date ,salary,department_id from employees;
--ORA-00909: invalid number of arguments

select employee_id ,first_name,last_name,concat(concat(first_name,' '),last_name) full_name,email,
hire_date ,salary,department_id from employees;
```

-- alternate way - pipe

```
select employee_id emp_id,first_name,last_name,first_name||' '||last_name full_name,email,
hire_date, salary,department_id from employees;
```

-- column calculation

```
select employee_id,first_name,email,hire_date,salary,salary+1000 new_salary,department_id from employees;

select employee_id,first_name,email,hire_date,salary,salary*12 annual_salary,department_id from employees;
```

-- unique department_id

```
select department_id from employees;
select count(department_id) from employees;
select distinct department_id from employees;
select count(distinct department_id) from employees;
select count(*) from (
select distinct department_id,job_id from employees);
```

-- where clause

```
select * from employees where salary >10000;

select * from employees where salary <3000;
select * from employees where salary >5000 and salary <7000;
select * from employees where salary >=5000 and salary <=7000;
select * from employees where salary between 5000 and 7000;
```

```
select * from employees where salary not between 5000 and 7000;

select * from employees where department_id=30;

select * from employees where department_id=30,60,90;

-- ORA-00933: SQL command not properly ended


select * from employees where department_id IN (30,60,90);

select * from employees where department_id NOT IN (30,50,80);

select * from employees where department_id=80 AND salary >10000;

select * from employees where department_id=60 OR salary >15000;

select * from employees where department_id=60 OR (department_id=80 AND salary >10000);


select * from employees where rownum <=5;


select * from employees where rownum =5;  -- Wrong


select * from employees where rownum > 5; -- wrong


select rownum,rowid,employee_id,first_name from employees;


select rownum,rowid,* from employees;  --ORA-00936: missing expression


select rownum,rowid,e.* from employees e;


select * from employees where commission_pct is null;


select * from employees where commission_pct is not null;


select count(*) from employees;
```

```
select count(commission_pct) from employees;

select count(*) from employees where commission_pct is null;

select employee_id,hire_date,to_char(hire_date,'yyyy') from employees;

select employee_id,hire_date,to_number(to_char(hire_date,'yyyy')) from employees;

select employee_id,hire_date,to_number(to_char(hire_date,'mm')) from employees;

select employee_id,hire_date,to_char(hire_date,'mon') from employees;

select employee_id,hire_date,to_char(hire_date,'Month') from employees;

select employee_id,hire_date,to_char(hire_date,'dd') from employees;

select employee_id,hire_date,to_char(hire_date,'dd-mm-yyyy hh24:mi:ss') from employees;

select * from employees where to_char(hire_date,'yyyy')='2005';

select * from employees where to_char(hire_date,'mmyyyy') between '092005' and '092006';

select * from employees where to_char(hire_date,'mm')='02';

select * from employees where to_char(hire_date,'mmyyyy')='032005';

select * from employees where to_char(hire_date,'FMDay')='Monday';

select * from employees where to_char(hire_date,'D')='2';
```

```
select sysdate from dual;

select current_date from dual;

select sysdate from employees;

select systimestamp from dual;

select trunc(systimestamp) from dual;
---------------------------------------- pattern matching  -- like

select * from employees where first_name like 'A%';

select * from employees where first_name like 'a%';

select * from employees where upper(first_name) like 'J%';


select * from employees where first_name like '%s';

select * from employees where first_name like '%an%';

select * from employees where first_name like 'S%n';

select * from employees where first_name like '_______';

select * from employees where length(first_name) =7;
```

```
select * from employees where first_name like '_a____';

select * from employees where first_name like '_a_t__';

select * from employees where first_name like 'A%' and salary like '%200';
select * from employees where first_name like '%\_%' escape '\';

-- Sorting -- Order by asc | desc

select * from employees;

select ascii('A') from dual; -- 65

select ascii('a') from dual; --97

select * from employees order by first_name;

select * from employees order by first_name desc;

select * from employees order by salary asc;

select * from employees order by salary desc;

-- null treated as highest value

select * from employees order by commission_pct;

select * from employees order by commission_pct desc;
```

```
-- order by more than one column

select * from employees order by salary desc,hire_date;

select * from employees order by 8;

select * from employees order by 6,8 desc;
```